

**CONTINUING EDUCATION COURSE TOPIC GUIDELINES
FOR WASTEWATER COLLECTION AND TREATMENT OPERATORS**

Approved March 23, 2009

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| Continuing Education Topics | Approved for Wastewater Collection and Treatment Operators |
|---|--|
| General | |
| Basic Computers | X |
| Basic Electricity for Operators | X |
| Basic Hydraulics | X |
| Geographic Info Systems (GIS) | X |
| Math for Operators | X |
| Water Chemistry | X |
| Water Microbiology | X |
| Safety | |
| Back Injury Prevention | NOT APPROVED |
| Backhoe or Forklift Operator | NOT APPROVED |
| Chlorine Safety | X |
| Confined Space | X |
| Electrical Hazards | X |
| Ergonomics | NOT APPROVED |
| Excavations, Trenching/Shoring/Competent Person | X |
| First-Aid/CPR | NOT APPROVED |
| Hazard Communication/Right-to-Know | X |
| Lab Safety - (example: eyewash stations, MSDS, HAZCOM training) | NOT APPROVED |
| Lockout/Tagout | X |
| Personal Protective Equipment/Respiratory Protection | X |
| Safe Handling of Chemical and Materials | X |
| Slips, Trips and Falls | NOT APPROVED |
| Spill Response | X |
| Traffic Control/Work Zone Safety | NOT APPROVED |
| Water & Blood-borne Pathogens | X |
| O & M Equipment | |
| Aeration Equipment | X |
| Belt Filter Presses | X |
| Blowers and Compressors | X |
| Booster Pumping Stations | X |
| Centrifuges | X |
| Chemical Storage/Feed Systems | X |
| Cleaning Equipment such as Jetting and Vac Trucks | X |
| Cross Connection/Backflow Prevention Equipment | X |
| Electrical Controls/SCADA | X |
| Flow Monitoring & Level Sensing Equipment | X |
| Generators/Switchgear | X |
| Hydraulic and Pneumatic Equipment | NOT APPROVED |
| Inspection Equipment such as CCTV, Smoke Testing, etc. | X |
| Instrumentation | X |
| Leak Detection | X |
| Cathodic Protection | X |
| Mechanical Process Equipment | X |
| Mixers | X |
| Motor Control Centers | X |
| Motors/Engines/Drives | X |
| Pipe, Valves, Fittings | X |
| Programmable Logic Controllers | X |
| Pumping/Lift Stations | X |
| Pumps | X |
| Stand-by/Aux/Support Equipment | X |
| Variable Freq Drives | X |

| WW Treatment Process/Quality Control | |
|---|--------------|
| Advanced WW Treatment - Nutrient Removal | X |
| Attached Growth/Fixed Film Systems (Trickling Filters, RBCs) | X |
| Biosolids Disposal/Land Application/Incineration | X |
| Chemical Storage & Handling | X |
| Chemical Treatment/Odor Control | X |
| Coupled Systems: TF/AS, TF/SC | X |
| Disinfection/Deactivation | X |
| Effluent Discharge & Reuse | X |
| Fats, Oil and Grease Removal | X |
| Grit Removal | X |
| Influent/Sidestream Characterization | X |
| Membrane Process: Membrane Bioreactors & Effluent Filtration | X |
| Natural Systems - Lagoons, Constructed Wetlands, Etc. | X |
| Odor Control | X |
| Process Control Techniques | X |
| Process Optimization | X |
| Sampling/Analysis | X |
| Sand/Media Filters | X |
| Screens/Grinders/Comminutors | X |
| Sedimentation/Clarification | X |
| Septage Receiving & Treatment | X |
| Sludge Conditioning, Dewatering, Stabilization, & Reduction | X |
| Suspended Growth Systems (Activated Sludge) | X |
| WW Collection Process | |
| Cleaning/Flushing & Pigging | X |
| Corrosion Control | X |
| Flow Measurement: Open Channel & Pipe | X |
| Infiltration/Inflow/Exfiltration | X |
| Inspection & Condition Assessment | X |
| Manhole Rehabilitation | X |
| Odor Control | X |
| Overflows & Bypass Control | X |
| Pumping/Lift Stations | X |
| Sampling & Lab Analysis | X |
| Service Lines & Connections | X |
| Sources & Characteristics | X |
| Stormwater Separation | X |
| Trenchless Technologies for Pipe Rehabilitation | X |
| Administration/Management | |
| Capacity, Management, O & M for Separate Systems | X |
| Compliance | X |
| Construction Inspection/Documentation/Design Build | X |
| Community/Public Relations/Compliant Response | X |
| Design Manual Development (SOPs and BMPs) | X |
| Emergency Response Planning & Security Training | X |
| Energy Efficiency/Energy Conservation at W/WW Facilities | X |
| Federal & State Financing Programs | NOT APPROVED |
| Finance, Budget, Rate Setting | NOT APPROVED |
| FOG Management Programs | X |
| Health & Safety Program Implementation | NOT APPROVED |
| Industrial Pretreatment Programs/Source Control | X |
| Legal Issues for W/WW Utilities | NOT APPROVED |
| Records & Reports: Monitoring/Reporting/Records Management | X |
| Nine Minimum Controls for Combined Systems | X |
| Planning/Organization/Project Management | X |
| Plant Optimization: Continue Process Improvement/Sustainability/Asset Management/Statistical Process Control Techniques | X |
| Private Property Issues/Service Laterals | X |
| Problem Solving/Troubleshooting/Decision Making | X |

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| Regs (CWA/SDWA, State & Local such as Operator Certification Requirements), NPDES Permit Requirements | X |
| Right-of-Way Management/Maintenance | NOT APPROVED |
| Risk Management | NOT APPROVED |
| Sanitary Surveys/Plant/System Inspections | X |
| Sewer Use Ordinances & Moratoriums | X |
| SSO/CSO Reduction/Elimination (SSO/CSO) | X |
| Supervision & Personnel Management/Communication Skills | X |
| Surface Water/Groundwater/Watershed Protection | X |
| TMDLs | X |
| Training/Teaching Skills | NOT APPROVED |
| Wet Weather Control Procedures | X |

